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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,225

10/15/2003

Xiaohui Qin

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
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EXAMINER

NORRIS, JEREMY C

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/687,225	Applicant(s) QIN ET AL.	
	Examiner Jeremy C. Norris	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11, 13-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2, 3, 6-11, 13-15 and 17 is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the first center conductor" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the second center conductor" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

For purposes of examination, the Examiner assumes that "the first center conductor" refers back to the 'first conductive region' and that "the second center conductor" refers to the 'second conductive region'.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 5 is rejected under 35 U.S.C. 102(a) as being anticipated by JP 2003-086621 A (Yoshihiko).

Yoshihiko discloses, referring primarily to figure 1, an electrical interconnection comprising: a first planar transmission device (1) having a first conductive region (4) with a first edge, a second planar transmission device (2) having a second conductive region (3) with a second edge, the second edge being offset from the first edge; and a bond wire (8) coupled to the first edge with a first bond and to the second edge with a second bond, wherein the first bond includes a first ball bond (5) and an a first intermediate bond (6), the first intermediate bond being closer to the first edge than the first ball bond [claim 5].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiko.

Yoshihiko discloses, referring primarily to figure 1, an electrical interconnection comprising: a first planar transmission device (1) having a first conductive region (4) with a first edge, a second planar transmission device (2) having a second conductive region (3) with a second edge, the second edge being offset from the first edge; and a bond wire (8) coupled to the first edge with a first bond and to the second edge with a second bond, wherein the first bond includes a first ball bond (5) and an a first intermediate bond (6), the first intermediate bond being closer to the first edge than the first ball bond. Yoshihiko does not specifically state "wherein the first center conductor is wider that the second center conductor. However, as best understood by the Examiner and as shown in figure 1, the first conductive region (4) is shown wider than the second conductive region (3). Although the figures may not be to scale, it would have been obvious to one having ordinary skill in the art to form the first conductive region (4) in the invention of Yoshihiko as shown in the figure. The motivation for doing so would have been to form a wiring pattern capable of supporting the two bonds (5, 6).

Allowable Subject Matter

Claims 2, 3, 6-11, 13-15 and 17-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2, 3, and 6-8, each claim states the limitation "a first opposite edge of the first center conductor; a second opposite edge of the second center conductor; and a second bond wire coupled to the first opposite edge with a third bond and to the second opposite edge with a fourth bond". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by, the prior art.

Claim 9 states the limitation "wherein the first conductive region is a first ground plane of a first co-planar transmission line and the second conductive region is a second ground plane of a second co-planar transmission line. This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by, the prior art.

Claim 10 states the limitation "wherein the first planar transmission device is a first slot line and the second planar transmission device is a second slot line". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by, the prior art.

Claim 11 states the limitation "further comprising a second bond wire coupled to an opposite edge of the first conductive region with a third bond and to the second

conductive region with a fourth bond. This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by, the prior art.

Regarding claims 13-15 and 17-20, claim 17 states the limitation "a second bond wire coupled to the second edge with at least a second ball bond and to the component with a second end bond, wherein the first intermediate bond is closer to the first edge than the first ball bond". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by, the prior art.

Response to Arguments

Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 4 October 2007 have been fully considered but they are not persuasive. Regarding claim 5, the Applicant alleges "the first and second planar transmission devices required by Claim 5 are not taught by Yoshihiko". The Applicant alleges that the substrate (1) and semiconductor chip (2) of Yoshihiko are each not a "planar transmission device". However, the Examiner notes that Applicant has not provided any special technical definition to the term "planar transmission device". Thus, the Examiner has afforded the term with a plain meaning definition as would be understood by the ordinarily skilled artisan. That is, a "planar transmission device" would be any such device having a planar shape and transmits signals and/or voltage. Thus, with this definition in hand, the ordinarily skilled artisan would indeed recognize that the substrate (1) and the semiconductor chip (2) do indeed satisfy the

first and second planar transmission devices required by Claim 5. Thus, Applicant's traversal of the claimed invention on this ground is deemed unsuccessful.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

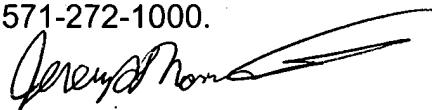
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Thursday, 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeremy C. Norris
Primary Examiner
Art Unit 2841

jcsn